

Menorrhagia: Innovative approaches to diagnosis and management.

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Introduction

Menorrhagia, characterized by excessively heavy or prolonged menstrual bleeding, affects a significant proportion of women and can have profound implications for their quality of life. This article provides a detailed overview of menorrhagia, including its causes, diagnostic approaches, and management strategies. By reviewing current research and clinical guidelines, this article aims to offer a thorough understanding of menorrhagia and its impact on women's health.

Menorrhagia is defined as menstrual bleeding that is heavier or longer than what is considered normal. It is a common gynecological issue that can significantly affect a woman's physical and emotional well-being. The condition can be caused by a variety of factors, ranging from hormonal imbalances to structural abnormalities of the uterus. Effective management requires a comprehensive approach, including accurate diagnosis and tailored treatment options.

Causes of menorrhagia

Menorrhagia can result from a variety of underlying conditions, which can be broadly categorized into structural, hormonal, and systemic causes.

Structural causes

Uterine fibroids: These benign tumors can cause heavy menstrual bleeding due to their size and location. Fibroids can disrupt the normal uterine lining and increase menstrual flow.

Endometrial polyps: These are growths on the uterine lining that can lead to irregular or heavy bleeding.

Adenomyosis: This condition involves the presence of endometrial tissue within the uterine muscle, causing painful and heavy periods.

Endometrial cancer: Though less common, endometrial cancer can present with menorrhagia, particularly in postmenopausal women.

Hormonal causes

Dysfunctional Uterine Bleeding (DUB): Imbalances in estrogen and progesterone can lead to irregular and heavy bleeding.

Polycystic Ovary Syndrome (PCOS): Women with PCOS may experience menorrhagia due to irregular ovulation and hormonal imbalances.

Systemic causes

Thyroid disorders: Both hypothyroidism and hyperthyroidism can contribute to menorrhagia by affecting hormone levels and menstrual regulation.

Bleeding disorders: Conditions such as von Willebrand disease and hemophilia can lead to excessive menstrual bleeding due to clotting issues.

Diagnosis of menorrhagia

Accurate diagnosis of menorrhagia involves a combination of patient history, physical examination and diagnostic tests.

Patient history and physical examination

Medical history: A thorough history should include menstrual patterns, associated symptoms and any underlying health conditions.

Physical examination: Includes a pelvic exam to assess for structural abnormalities and an evaluation of overall health.

Diagnostic tests

Laboratory tests: Complete Blood Count (CBC) to assess for anemia and thyroid function tests to rule out thyroid disorders.

Imaging studies: Ultrasound imaging can identify structural abnormalities like fibroids or polyps.

Endometrial biopsy: Performed if there is suspicion of endometrial cancer or abnormal endometrial changes.

Hysteroscopy: A procedure that allows direct visualization of the uterine cavity to diagnose and sometimes treat structural abnormalities.

Management of menorrhagia

Management strategies for menorrhagia depend on the underlying cause, severity of symptoms and patient preferences.

Medical management

Hormonal treatments: Oral contraceptives, progestins and hormonal IUDs can help regulate menstrual bleeding and reduce its volume.

Nonsteroidal Anti-Inflammatory Drugs (NSAIDs): Medications like ibuprofen can reduce menstrual flow and alleviate pain.

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Received: 20-Jul-2024, Manuscript No. AAGGS-24-142627; Editor assigned: 23-Jul-2024, AAGGS-24-142627 (PQ); Reviewed: 06-Aug-2024, QC No. AAGGS-24-142627; Revised: 13-Apr-2025, Manuscript No. AAGGS-24-142627 (R); Published: 20-Apr-2025, DOI: 10.35841/AAGGS.9.2.257

Desmopressin: Used in cases of von Willebrand disease to improve clotting function.

Surgical management

Uterine fibroid embolization: A minimally invasive procedure that blocks the blood supply to fibroids, causing them to shrink.

Endometrial ablation: A procedure that destroys the uterine lining to reduce or stop bleeding. Suitable for women who do not wish to preserve their fertility.

Hysterectomy: The surgical removal of the uterus, considered in cases where other treatments have failed and when preserving fertility is not a concern.

Lifestyle and supportive measures

Iron supplementation: Recommended for women with anemia due to heavy bleeding.

Nutritional support: Ensuring a balanced diet to manage anemia and overall health.

Conclusion

Menorrhagia is a condition with diverse causes and significant impact on women's health. Effective management requires a comprehensive approach that includes accurate diagnosis and tailored treatment strategies. Advances in medical and surgical treatments offer promising options for alleviating symptoms and improving quality of life for affected women.

Citation: Simon S. Menorrhagia: Innovative approaches to diagnosis and management. *Gynecol Reprod Endocrinol.* 2025;9(2):257